Respiratory system worksheet #2

Wed. the 11th of September.

Fill in the blank

1. Dalton’s law states that the total pressure of a gas is the sum of the

2. At 100% saturation there are oxygen molecules to every hemoglobin molecule.

3. In hemoglobin the oxygen bind to the group.

4. Alveolar ventilation rate = rate x (Tidal volume - )

Multiple choice

1. Affinity of O2 and hemoglobin increase with?
   a. Lower pH
   b. Higher timp
   c. Higher amounts of 2,3-diphosphoglyceric acid
   d. None of the above

2. Typically deoxygenated blood still has how many O2 molecules bound to it?
   a. 4
   b. 3
   c. 2
   d. 1

3. All of these affect the amount of gas in a liquid except:
   a. pH
   b. Solubility
   c. Partial pressure
   d. Temperature

4. If you climb a mountain and are at a higher elevation how will it affect your oxygen saturation?
   a. Oxygen saturation will decrease
   b. Oxygen saturation will increase
   c. Oxygen saturation will be the same
   d. Oxygen saturation will stop and you will die.

Short answer

1. In lecture we looked at a dissociation curve, what does this curve show us?
2. What are the two ways oxygen is carried in blood? Which is more common?

3. As oxygen is moved through the body the partial pressure of oxygen and carbon dioxide changes, why does this change occur?

4. What are the three gas laws we talked about in lecture? How are they different from each other?